

Appl. No. 10/649,580  
Amdt. dated March 28, 2005  
Reply to Office Action of December 3, 2004

PATENT

### REMARKS/ARGUMENTS

Claims 1-20 are pending in the present patent application. Claims 1, 8, and 15 have been amended. No new matter has been added to the amended claims. Reconsideration of the claims is respectfully requested.

#### Amendments to the Specification

Paragraph [0027] of the specification has been amended to correct a typographical error.

#### Objection to Claim 3

Claim 3 has been amended to correct the lack of antecedent basis for the second pattern.

#### Rejections of the Claims

Claims 1, 4, 6, 8, 11, 13, 15, and 16 were rejected as being anticipated by U.S. Patent 6,369,969 to Christiansen et al.

Independent claims 1, 8, and 15 have been amended to clarify the scope of the invention. Claim 1, for example, to recite "decoding circuitry for decoding a direction signal to provide a decoded signal, wherein the direction signal is generated by the read/write head in response to reading a directional pattern stored on a data track of a magnetic disk between a data sector and a servo sector."

Christiansen analyzes a sync mark pattern to determine when the polarity of the bias layer has deviated from the preferred polarity. Christiansen at col. 1, lines 54-67. The sync mark pattern is located *within* each servo and data sector. See Christiansen at col. 1, lines 19-22.

According to amended claim 1, the decoding circuitry decodes a direction signal generated in response to a direction pattern that is stored between a data sector and a servo sector. As described in the present application at paragraph 28, the direction pattern is stored in the previously unused areas of data tracks that precede the servo samples. By using a redundant area of the disk, there is no real estate penalty.

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The direction pattern allows a disk drive system of the present invention to be designed to operate to the maximum efficiency in an environment subjected to external influences. Thus, a disk drive of the present invention is very robust. The directional pattern also reduces false triggers.

Also, because a read/write head of the present invention reads the direction pattern before reading the servo sample, the comparing circuitry has time to determine whether the read/write head has reversed polarity and invert the signal output, if required. The present invention ensures that the sensitive servo sample information including the preamble and the servo address mark will be read with the correct polarity every time, which contributes to the efficiency of the system.

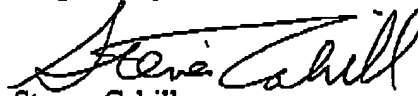
For at least these reasons, it is respectfully submitted that amended claim 1 and its dependent claims are novel and nonobvious over Christiansen.

### CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,

  
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